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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,633	04/15/2004	Gary Dilling	446-011602-US (PAR)	9000
2512	7590	10/12/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			SHARP, JEFFREY ANDREW	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/825,633

Applicant(s)

DILLING, GARY

Examiner

Jeffrey Sharp

Art Unit

3677

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 02 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

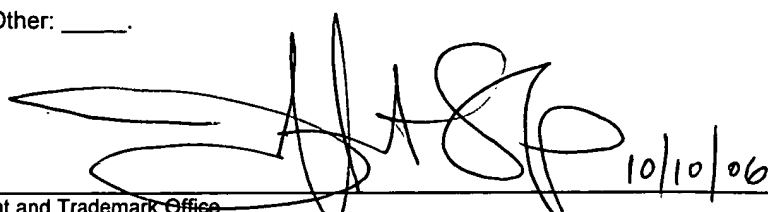
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1, 2, 4 and 5 (see box 11).  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.



**ROBERT J. SANDY  
PRIMARY EXAMINER**

Continuation of 11. does NOT place the application in condition for allowance because:

Claims 1, 2, 4, and 5 would be rejected under 35 U.S.C. 103(a) as being unpatentable over US-5,957,645 to Stacy in view of US-6,199,455 to Wagner.

In short, Stacy substantially teaches each and every limitation found in claims 1, 2, 4, and 5 as amended after final, including opposing transition surfaces -- each transition surface comprising a portion of the installation and removal walls of adjacent spiral wings.

However, Stacy fails to teach an interference surface as a portion of each of said transition surfaces, the interference surface tapering due to a first larger radial distance and second smaller radial distance.

Wagner teaches an interference surface constructed "AS A PORTION" of each transition surface, said interference surface tapering at a small angle with a first radial distance larger than a second radial distance, in order to provide a "stick-fit" function.

Therefore, it would have been obvious to those of ordinary skill in the art, at the time the invention was made, to modify the transition surfaces taught by Stacy, to have at least "A PORTION" constructed as a tapering interference surface as suggested by Wagner, in order to provide a "stick-fit" function between the recess and a driver bit.

Examiner notes that while the transition surfaces are clearly defined as each being the radially inner most portion comprising both a portion of the installation wall and a portion of the removal wall, the interference surfaces as claimed, are not limited in such a manner. Rather, the interference surface merely needs to be constructed "as A PORTION of" (i.e., broadly "as any portion of") each transition surface. Accordingly, since Wagner teaches at least one of the removal walls to include an interference surface, Wagner effectively suggests "an interference surface constructed as A PORTION of each of said transition surfaces" as claimed. Examiner suggests more clearly describing the interference surfaces to overcome this rejection. Examiner further encourages convincing submissions as to why it would be unobvious in view of Wagner to provide tapered interference surfaces to each side of the transition surface (i.e., on both installation and removal walls).

Claims 1, 2, 4, and 5 would be further rejected under 35 U.S.C. 103(a) as being unpatentable over US-5,957,645 to Stacy in view of US-2,474,994 to Tomalis.

In short, Stacy substantially teaches each and every limitation found in claims 1, 2, 4, and 5 as amended after final, including opposing transition surfaces -- each transition surface comprising a portion of the installation and removal walls of adjacent spiral wings.

However, Stacy fails to teach an interference surface as a portion of each of said transition surfaces, the interference surface tapering due to a first larger radial distance and second smaller radial distance.

Tomalis teaches an interference surface (22, 23) constructed "AS A PORTION" of each transition surface (15); said interference surface tapering at a small angle with a first radial distance larger than a second radial distance, in order to provide a "stick-fit" function.

Therefore, it would have been obvious to those of ordinary skill in the art, at the time the invention was made, to modify the transition surfaces taught by Stacy, to have at least "A PORTION" constructed as a tapering interference surface as suggested by Tomalis, in order to provide a "stick-fit" function between the recess and a driver bit.

As for claim 2, Tomalis suggests a taper angle of 2 degrees.

Examiner suggests more clearly describing the interference surfaces to overcome this rejection. Examiner further encourages convincing submissions as to why it would be unobvious in view of Tomalis to provide tapered interference surfaces to each side of the transition surface (i.e., on both installation and removal walls).

Claims 1, 4, and 5 would be further rejected under 35 U.S.C. 103(a) as being unpatentable over US-5,957,645 to Stacy in view of US-2,046,839 to Phillips et al.

In short, Stacy substantially teaches each and every limitation found in claims 1, 2, 4, and 5 as amended after final, including opposing transition surfaces -- each transition surface comprising a portion of the installation and removal walls of adjacent spiral wings.

However, Stacy fails to teach an interference surface as a portion of each of said transition surfaces, the interference surface tapering due to a first larger radial distance and second smaller radial distance.

Phillips et al. teach an interference surface (4') constructed "AS A PORTION" of each transition surface; said interference surfaces (4')

tapering at a small angle with a first radial distance larger than a second radial distance, in order to: 1) prevent "a tendency of the driver to cam out of the recess when united in operative engagement with each other", 2) make "the outer edge" of the head stronger, and 3) cause "the driver to centralize itself with respect to the screw head."

Therefore, it would have been obvious to those of ordinary skill in the art, at the time the invention was made, to modify the transition surfaces taught by Stacy, to have at least "A PORTION" constructed as a tapering interference surface as suggested by Phillips et al., in order to 1) prevent "a tendency of the driver to cam out of the recess when united in operative engagement with each other", 2) make "the outer edge" of the head stronger, and/or 3) cause "the driver to centralize itself with respect to the screw head."

Examiner suggests more clearly describing the interference surfaces to overcome this rejection. Examiner further encourages convincing submissions as to why it would be unobvious in view of Phillips et al. to provide tapered interference surfaces to each side of the transition surface (i.e., on both installation and removal walls).